

## REMARKS

The amendments proposed in the Final Office Action response filed June 14, 2004 were not entered by the Examiner, as noted in the Advisory Action mailed July 16, 2004. Because the amendments proposed at that time were not formally entered, the listing of the claims presented herein is marked to show the changes to the claims made in that response. The Listing of the Claims is also marked to show new amendments made to address the comments in the Advisory Action. Arguments relating to the amendments proposed in the June 14, 2004 filing and repeated herein are found in that response and are incorporated herein by reference. Arguments relating to the new amendments follow below.

Claims 1-99-26, 29-31, 50, 51, 54-58 and 60-64 are pending. Claims 27, 28, 32-49, 52 and 59 were previously cancelled. Claim 53 is canceled herein. Claims 1-7, 17, 21, 23, 50, 54 and 58 are amended. The amendments add no new matter.

The Advisory Action notes several §112, 2<sup>nd</sup> paragraph issues in the claims as presented in the Final Office Action response. In particular, the Advisory Action states:

“For example, claim 4 compares the candidate sequence to a database of microbial sequences and concludes that the presence of the candidate sequence identifies a symbiotic microbial organism; however, the database in question does not need to be from a symbiotic organism. It could contain sequences from a pathogenic microorganism or include multiple microorganisms.”

Applicant has amended claim 4 to recite “wherein the presence of a said candidate sequence in said database of microbial sequences identifies said candidate sequence as belonging to a microbial organism.” Applicant submits that the amendment is sufficient to overcome this objection.

The Advisory Action also points to claims 5 and 6 for a similar issue. Claim 5 is amended herein to recite “wherein said microbial organism is a mutualistic organism, a commensal organism, a parasitic organism or a pathogenic organism.” Applicant notes that the limitations in claim 5 as amended do not require pre-knowledge of the type of microbial organism identified, but, rather, refer to preferred types of microbial organism that can be indicated by the method of claim 4.

Claim 6 is amended to depend from claim 4 as amended, and to recite “wherein said host organism in step (a) has a pathogenic condition and said microbial organism is an intracellular pathogenic organism.” Thus, claim 6 further indicates a preferred type of microbial organism that can be indicated by the method of claim 4.

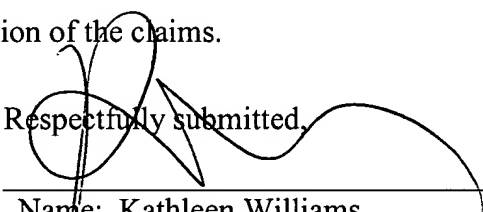
The Advisory Action also states that “claim 8 continues to require pre-knowledge of the microbe in the host organism as being an intracellular pathogen before the method is executed.” Applicant submits that the reference to an intracellular pathogen in claim 8 as amended herein does not require pre-knowledge of the type of microbe, but rather, refers to a preferred type of microbial organism that can be indicated by the methods of claims 1, 2 or 3.

The Advisory Action notes that “claim 17 states that the host organism is a microorganism yet the preambles of claims 1, 2 and 3 specifically exclude microbial host organisms.” Applicant submits that the amendment of claim 17 directed herein is sufficient to overcome this objection.

In view of the above, Applicant submits that all issues raised in the Final Office Action mailed January 14, 2004 and in the Advisory Action mailed July 16, 2004 have been addressed. Applicant respectfully requests re-consideration of the claims.

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Respectfully submitted,

  
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